

Resilience Design Review Committee

November 19, 2019

Projects Under Review:

- St. Anthony Green Streets
- St. Bernard Neighborhood Campus

Agenda

Design teams will be available to engage 30 minutes before and after the meeting

➤ **Welcome**

- ❖ Resilience Design Review Committee Overview
- ❖ Introductions
 - Committee
 - Design Team
 - Project Manager
- ❖ Rules of Engagement

➤ **St. Bernard Neighborhood Campus – 60 % Design Review**

- ❖ Presentation
- ❖ Comments / Questions

➤ **St. Anthony Green Streets – 60% Design Review**

- ❖ Presentation
- ❖ Comments / Questions

➤ **Closing Remarks – Meeting Facilitator**

Resilience Design Review Committee Overview:

- Established **December 14, 2017** by **POLICY MEMORANDUM NO. 133 (R)** for the purpose of reviewing and advising the Chief Administrative Officer regarding design aspects of projects under the City of New Orleans Resilience Strategy
- Addresses the need to ensure that publicly funded resilience projects meet standards of design in furtherance of the goals of the resilience strategy including, but not limited to:
 - Those created directly out of the resilience strategy
 - Those funded by programs with specific resilience and sustainability priorities
 - Those with major stormwater management and/or green infrastructure components

Resilience Design Review Committee Overview:

- Provide regular opportunities throughout the design process to report on progress toward long-term outcomes, including, but not limited to:
 - Risk reduction
 - Public health improvements
 - Community development
 - Neighborhood revitalization
 - Connection to economic opportunity

- The Committee will review across the following categories:
 - Location, character, and extent
 - Incorporation of explicitly identified resilience values into design
 - Equity impacts and outcomes
 - Context-sensitive expression in design
 - Creative community involvement and engagement
 - Operations and maintenance planning for long-term performance
 - Best maintenance design for resilience performance criteria
 - Energy conservation in design and maintenance

Rules of Engagement

- Presentations will precede public comment
- Please limit questions to the projects under review
- Please fill out a comment card to provide a comment/ask a question
- Please raise your hand and your comment card will be collected by a staff member
- There is a two-minute time limit on questions

Tonight's presentations may be found on the Resilience website:

<https://www.nola.gov/resilience/designreview/meetings/>

St. Anthony Green Streets

https://www.nola.gov/nola/media/Climate-Action/Progress/StAnthonyGS_60-RDRC-Presentation-111919.pdf

St. Bernard Neighborhood Campus

https://www.nola.gov/nola/media/Climate-Action/Progress/St_Bernard_60-_DRC_Presentation.pdf

St. Bernard Neighborhood Stormwater Resilience Project

60% Design Review Committee Meeting



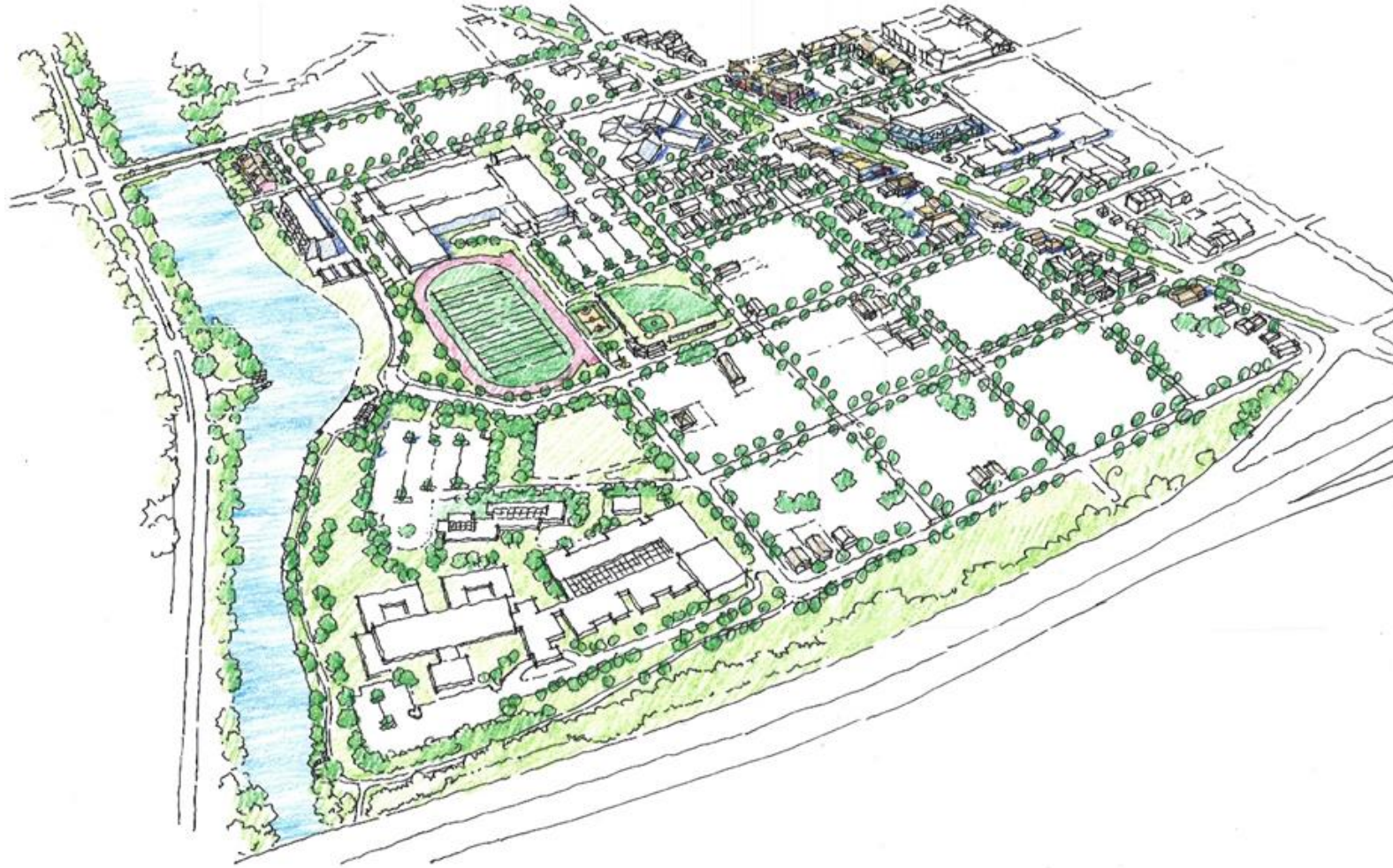
CITY OF NEW ORLEANS
MAYOR LATOYA CANTRELL



GENTILLY
Resilience
DISTRICT

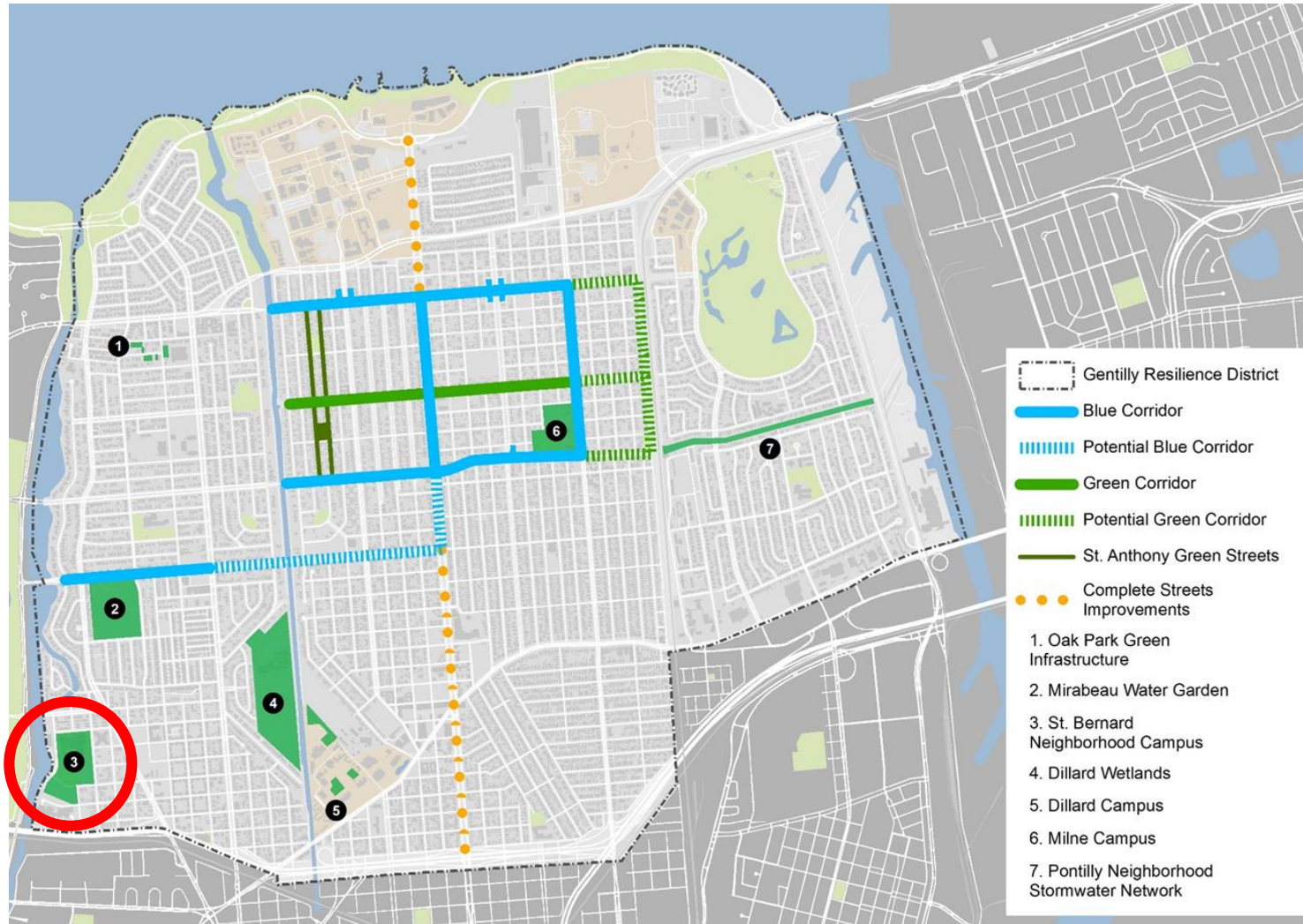
Agenda

- Project Overview and Goals
- Existing Conditions
- Community Outreach
- 60% Design
- Project Benefit Cost Analysis
- Schedule
- Q&A



Project Overview

- Budget: \$10 M
- Project #3
- Between Harrison and I-610 & Bayou St. John and St. Bernard Avenue



Project Goals



Water Goals

1. Reduce flooding by storing stormwater on site before slowly releasing it into the drainage system.
2. Limit subsidence by raising and stabilizing groundwater levels.
3. Reduce and stabilize groundwater salinity.
4. Demonstrate resilient water management at all scales in a beautiful and tactile language accessible to all audiences.



Public Health Goals

1. Increase access to high quality parks.
2. Provide recreation: sports fields, walking trails, play ground, canoe/kayak access to Bayou St. John.
3. Contribute to low-stress biking corridors.
4. Safety and security lighting.



Urban Heat Goals

1. Increase native plantings for shade & habitat.
2. Provide circulating surface water with interactive features fed by filtered rainwater.



Project Goals

Economic Goals

1. Meet NDR requirements for Benefit Cost Analysis for HUD funding.
2. Create an economically sustainable campus through educational, institutional, and for-profit operators.
3. Demonstrate that resilient neighborhood-scale stormwater management can provide benefits far beyond the initial investment.

Cultural Goals

1. Develop a community established around sports and recreational activities.
2. Information kiosk for public education.
3. Demonstrate that green infrastructure can contribute to beautiful and functional public spaces.



Existing Conditions Flooding



PAST FLOODING

June 20, 2017



August 5, 2017



June 1, 2017



August 5, 2017



 Rain gauge host

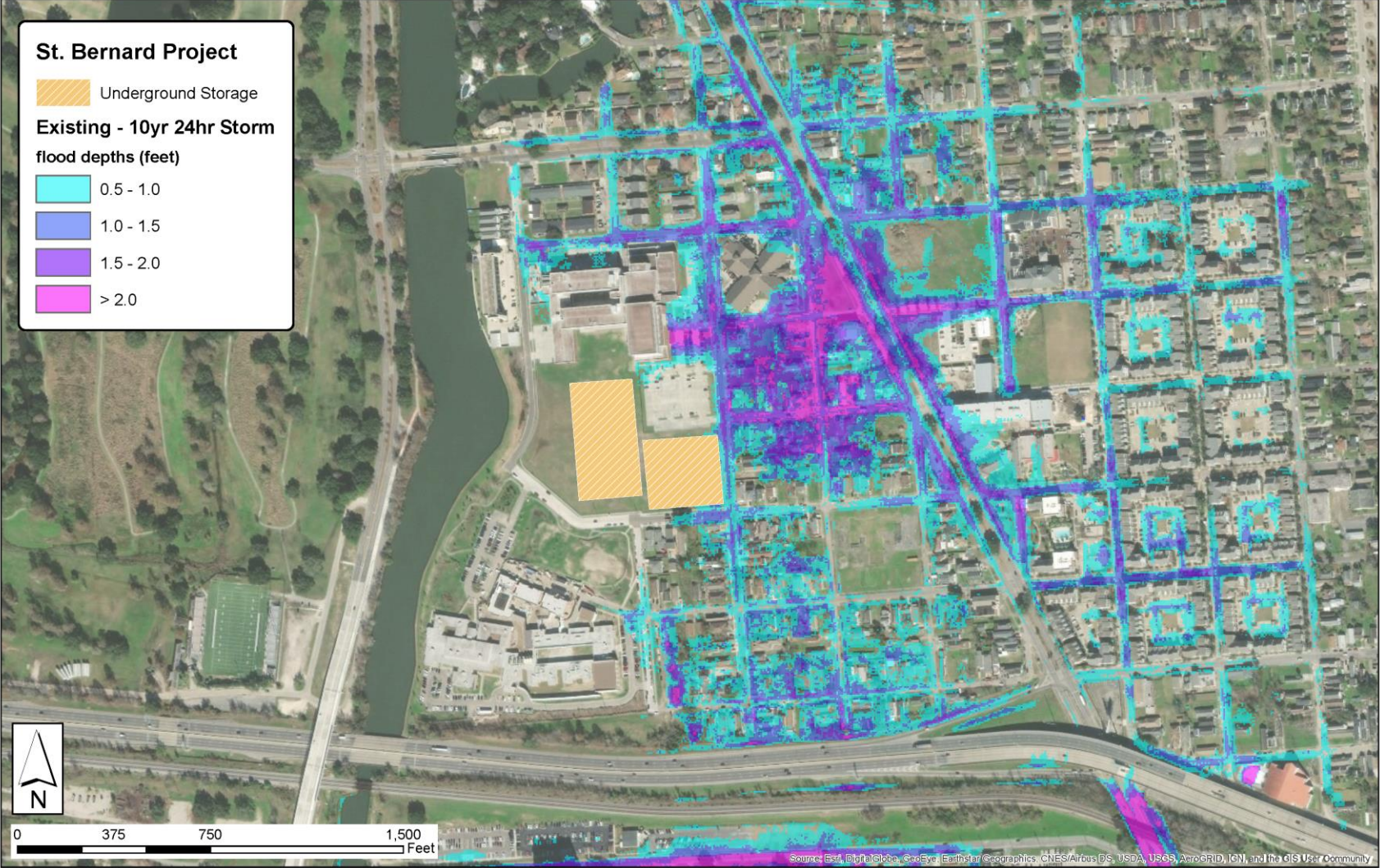
Existing Flooding Conditions

 **APRIL 4, 2019**



 Rain gauge host  Observed flooding  Broken catch basin

Existing 10-Year



Existing Conditions Fields



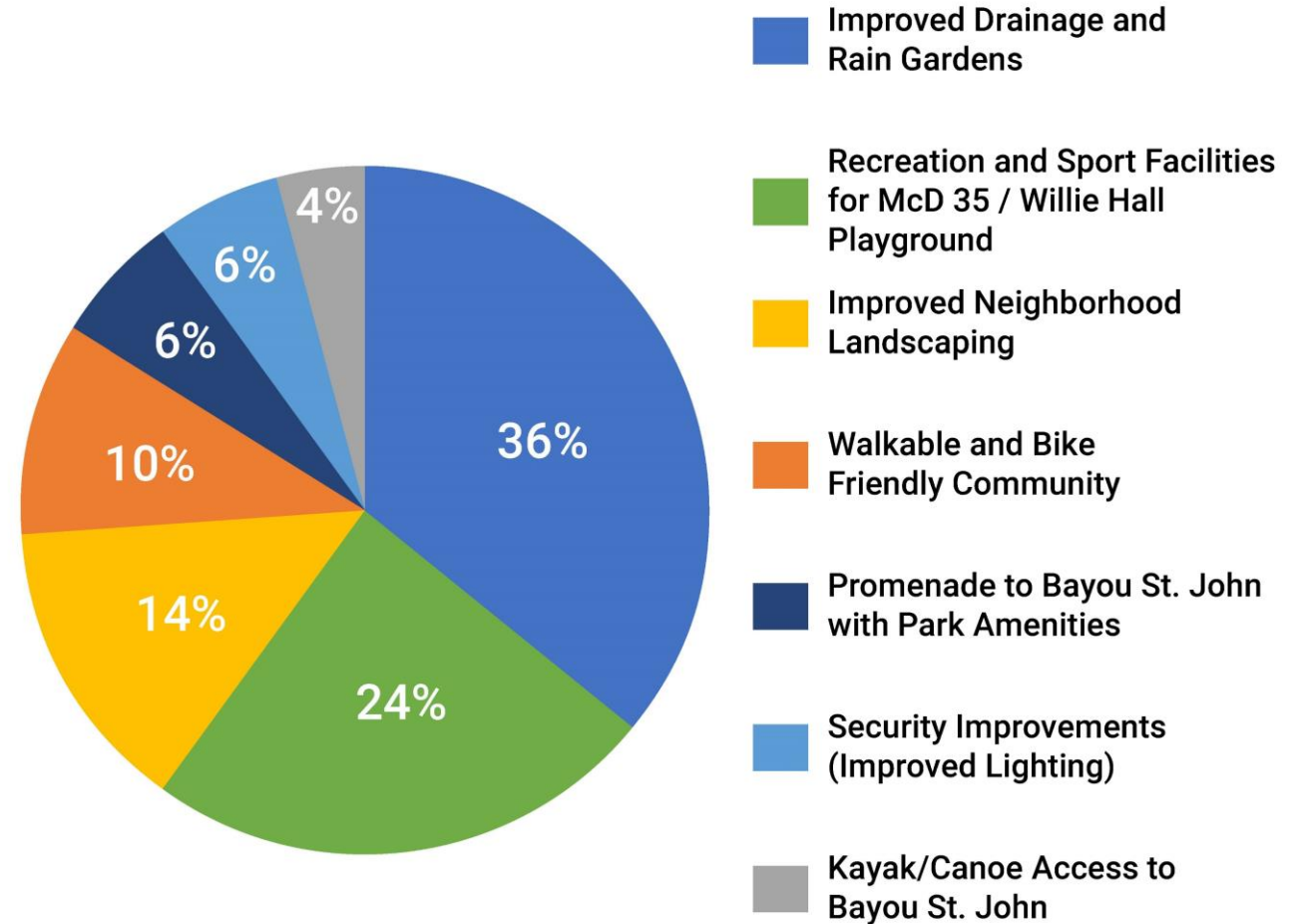
Existing Conditions Roads



Scoping Phase Public Engagement

What we Heard

1. Improve Drainage
2. Sports Facilities
3. Improve Neighborhood Landscaping
4. Provide Walkable and Bike Friendly Area
5. Provide Park Amenities
6. Security Improvements
7. Kayak/Canoe Access to Bayou St. John



Public Engagement

Park Amenities What We Heard

Liked

1. Playground
2. Exercise Station
3. Green Area
4. Boardwalk
5. Shade Structure

Disliked

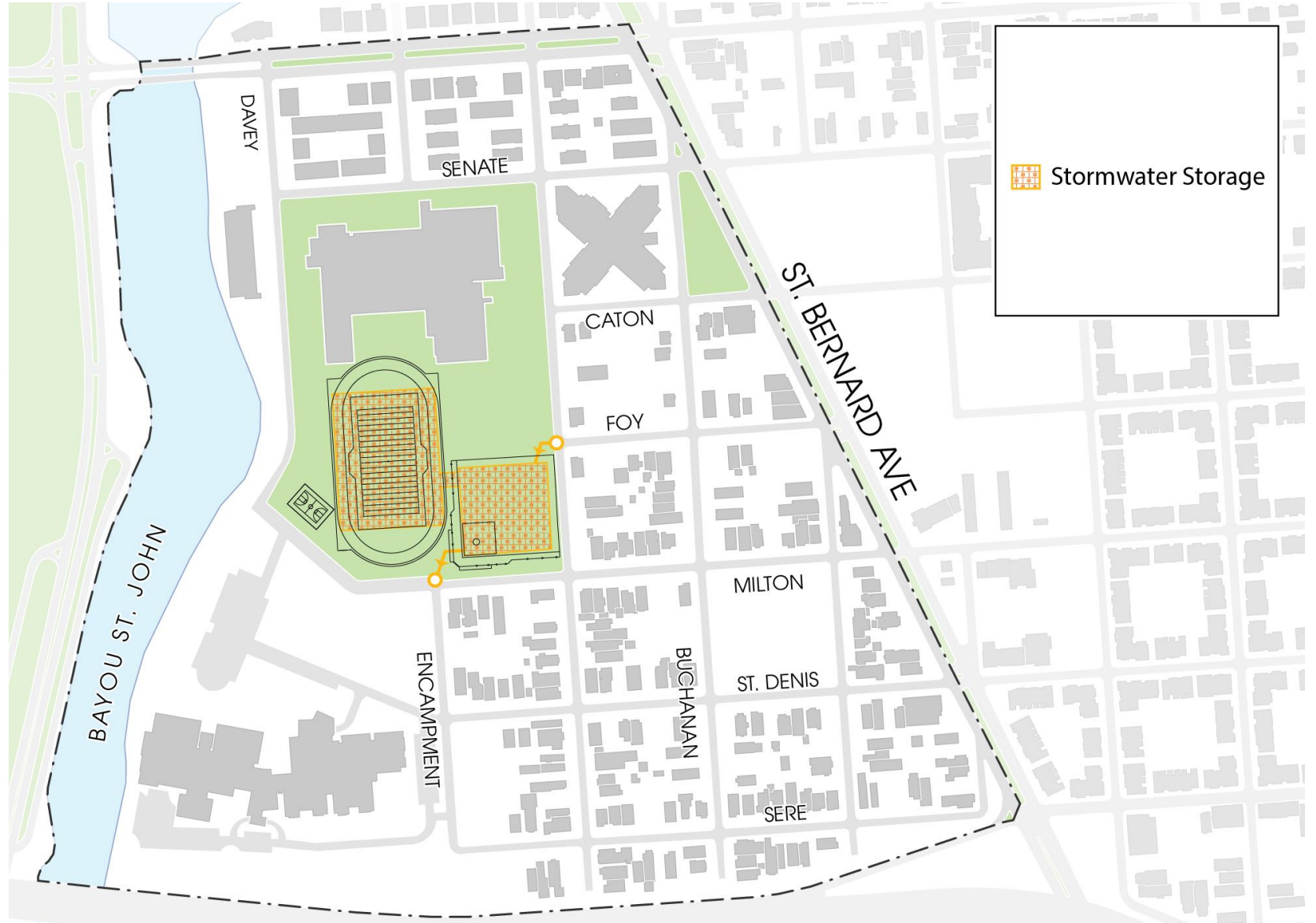
1. Benches
2. Public Fountain
3. Dog Park
4. Picnic Area
5. Event Lawn



Project Phasing

Phase 1

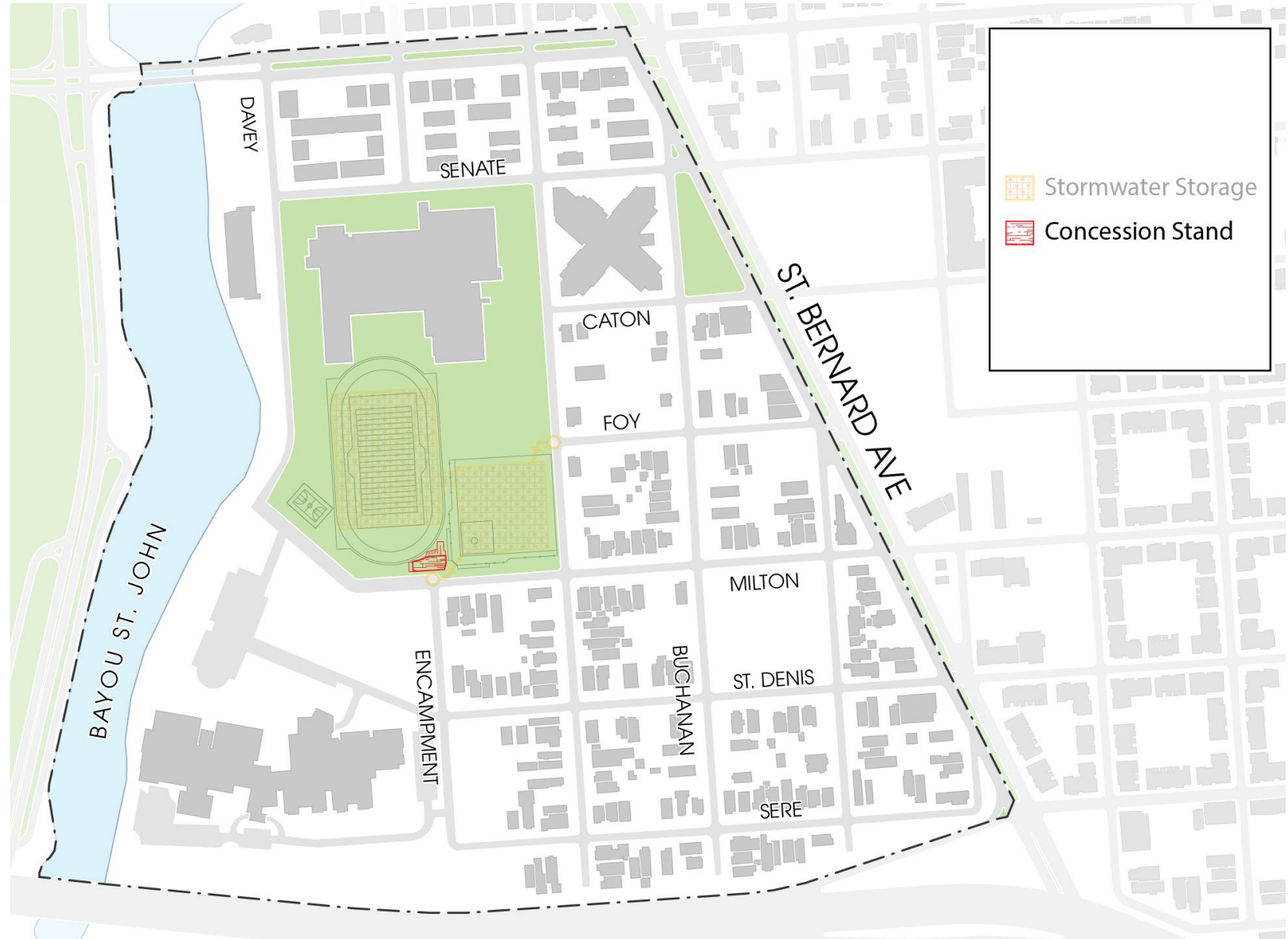
- Stormwater Storage
- Athletic Fields



Project Phasing

Phase 2

- Concession Building



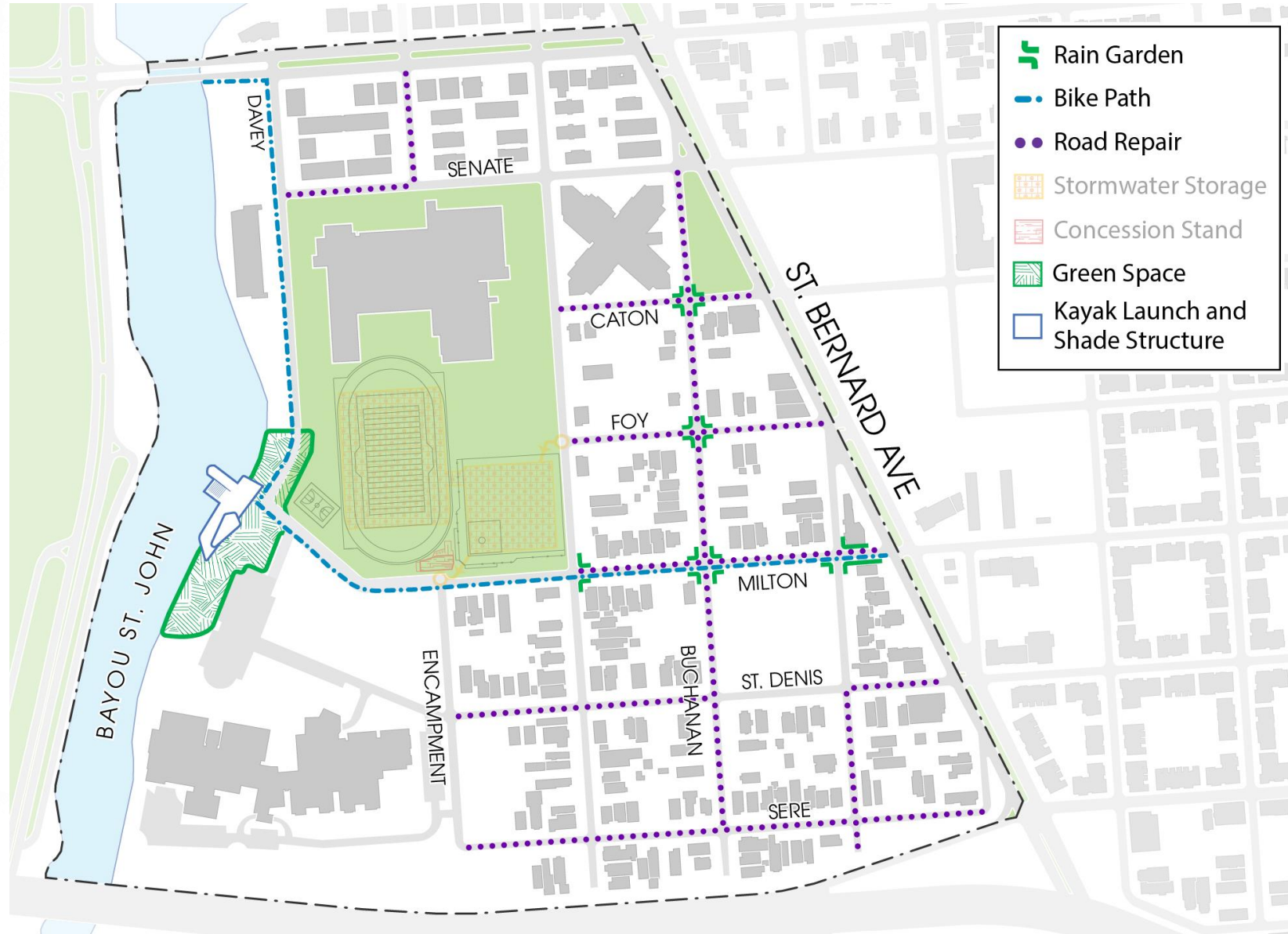
Project Phasing

Phase 3

- Rain Gardens
- Road Repairs
- Bike Path

Bayou St. John Park

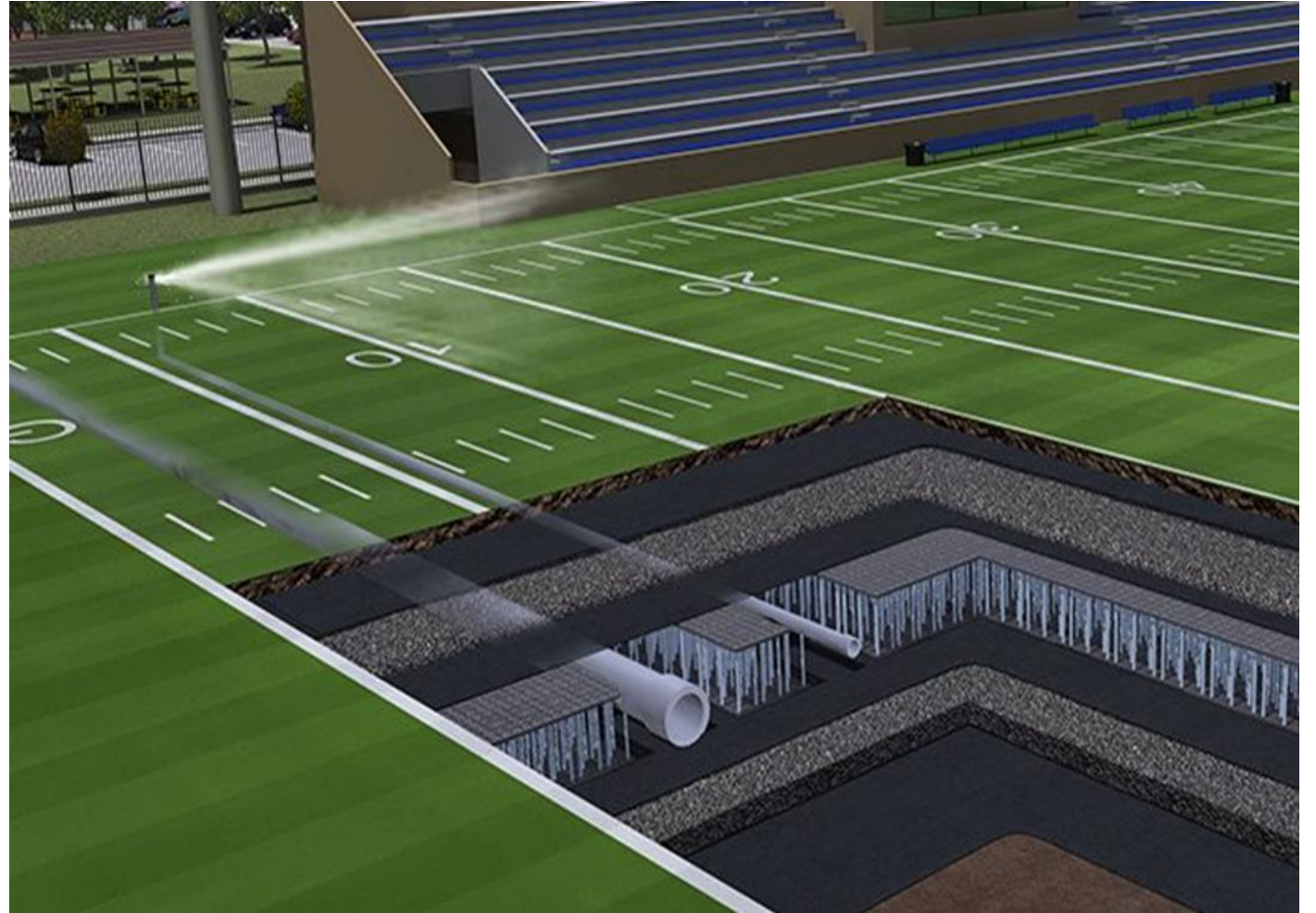
- Playground
- Shade Structure
- Boardwalk
- Walking Trail
- Kayak/Canoe Launch



Phase 1 – Underground Stormwater Storage

Multi-Functional Recreational Fields

- Underground stormwater detention basin
- Increase storage to 5 million gallons of strategic stormwater storage
- sodded athletic fields



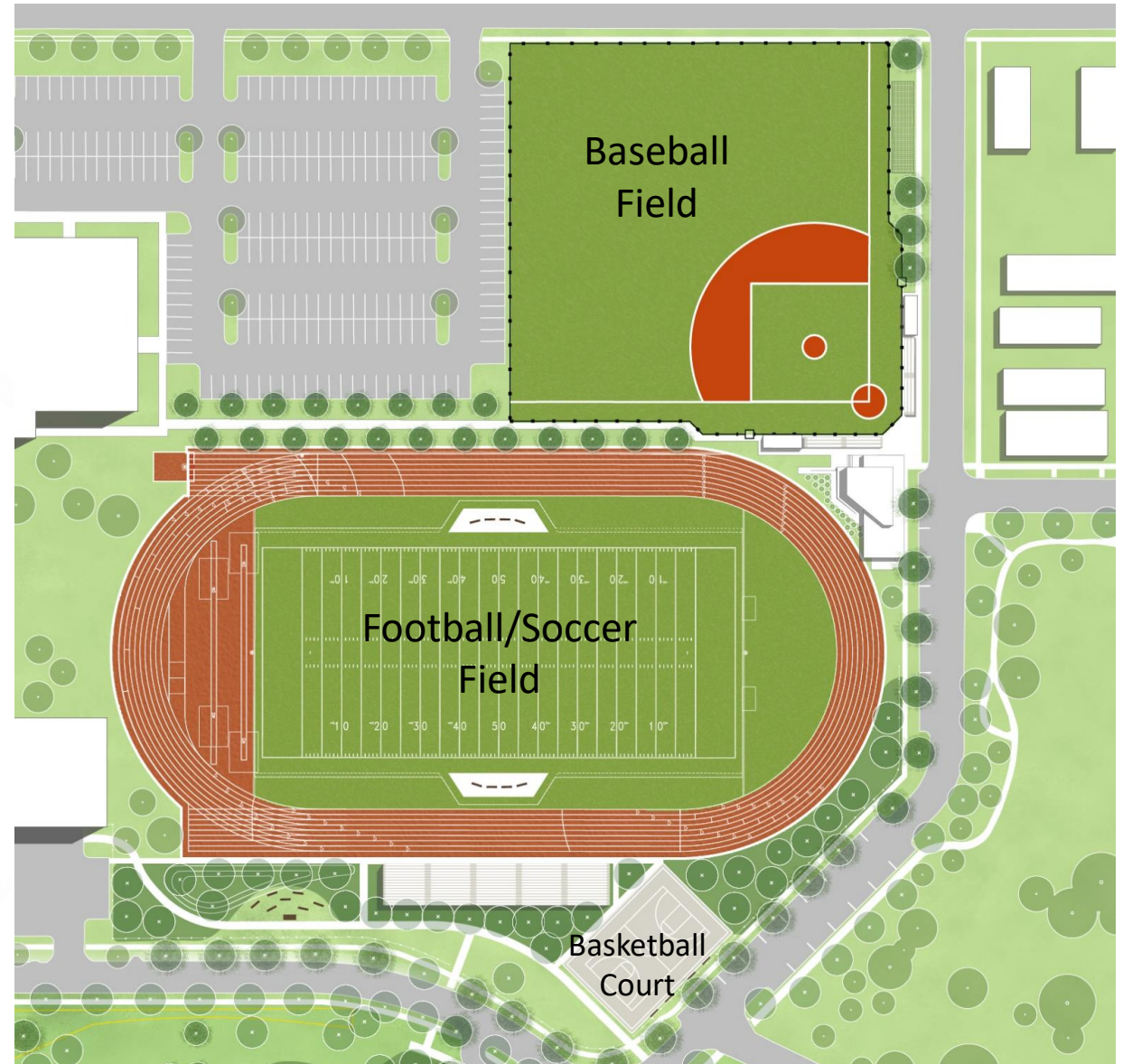
Phase 1 – Willie Hall Playground

Athletic Fields

- Football/Soccer Field
- Baseball/Softball Field
- Basketball Court
- Sports and Area Lighting
- Bleachers

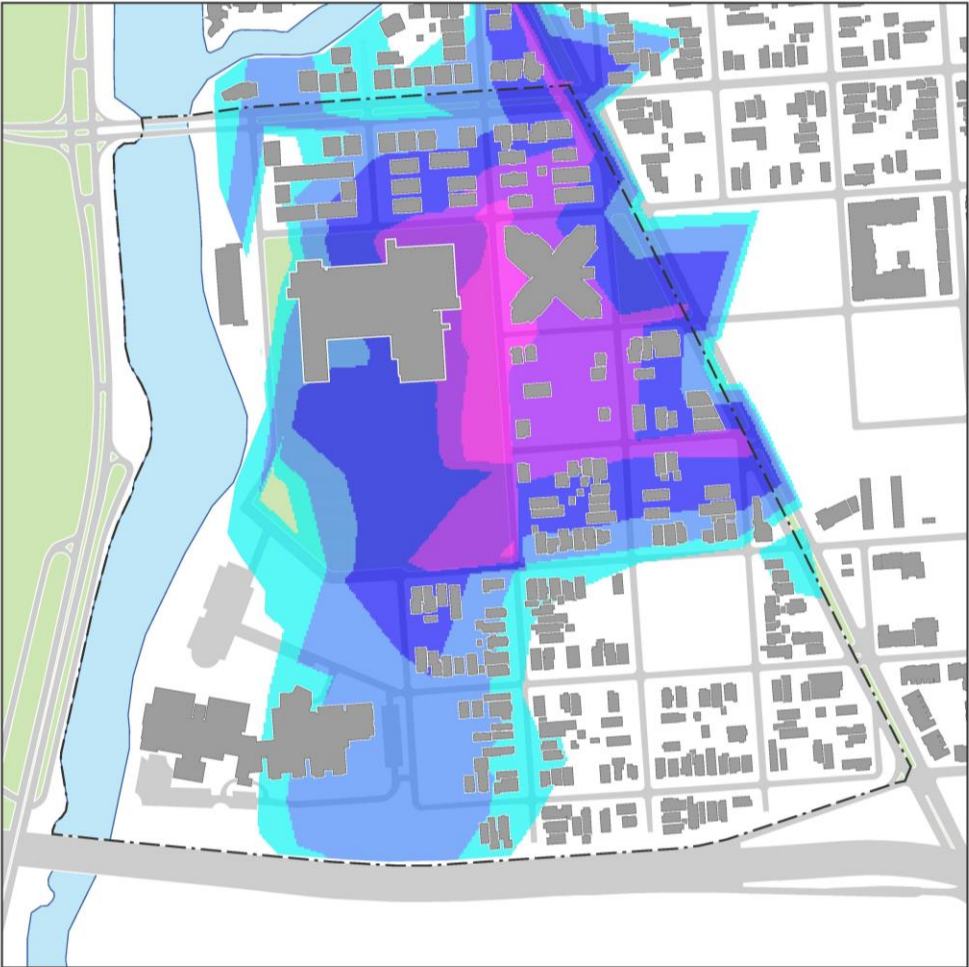
Additional Features:

- Landscaping

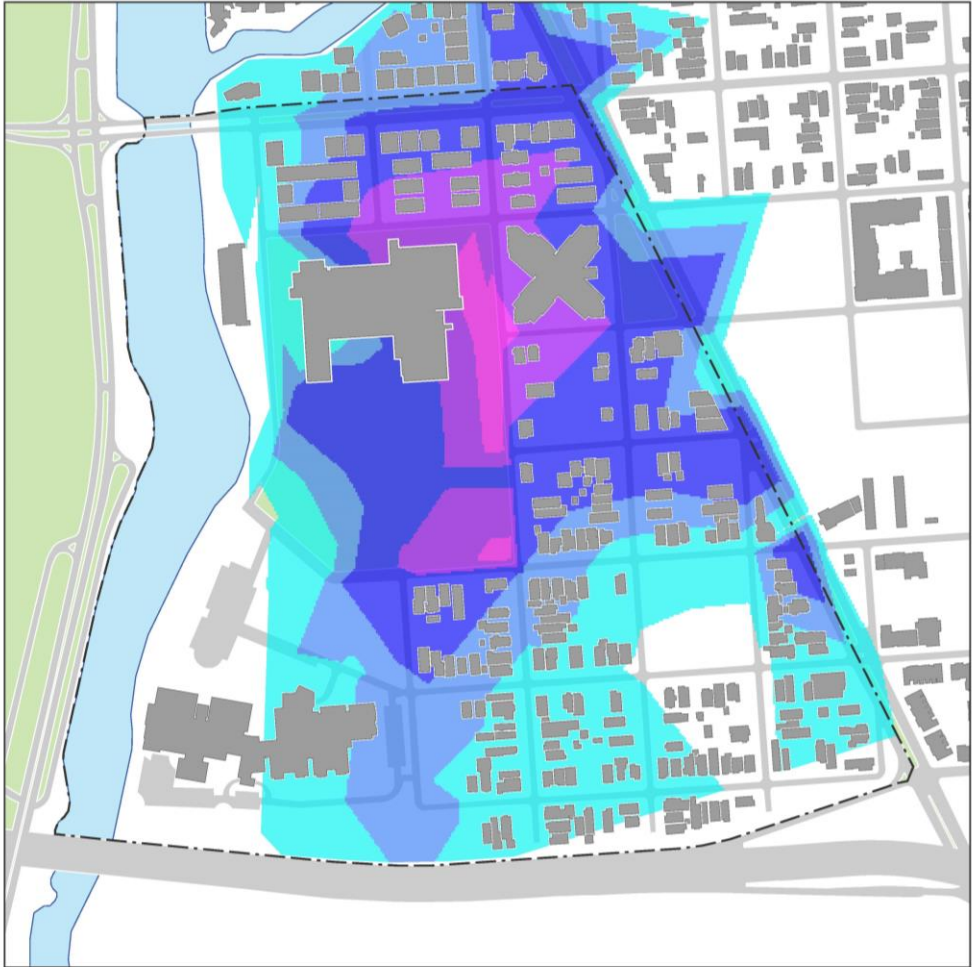


Flood Reduction Benefits

6.0in Storm - Projected Benefit



7.5in Storm - Projected Benefit



Phase 2 - Concession Building





Key Design Element

Rain Gardens

Bump-outs:

- Provide water quality, promotes transpiration, and enhances the streetscape
- Provides shorter crossing distance for pedestrians, enhancing safety

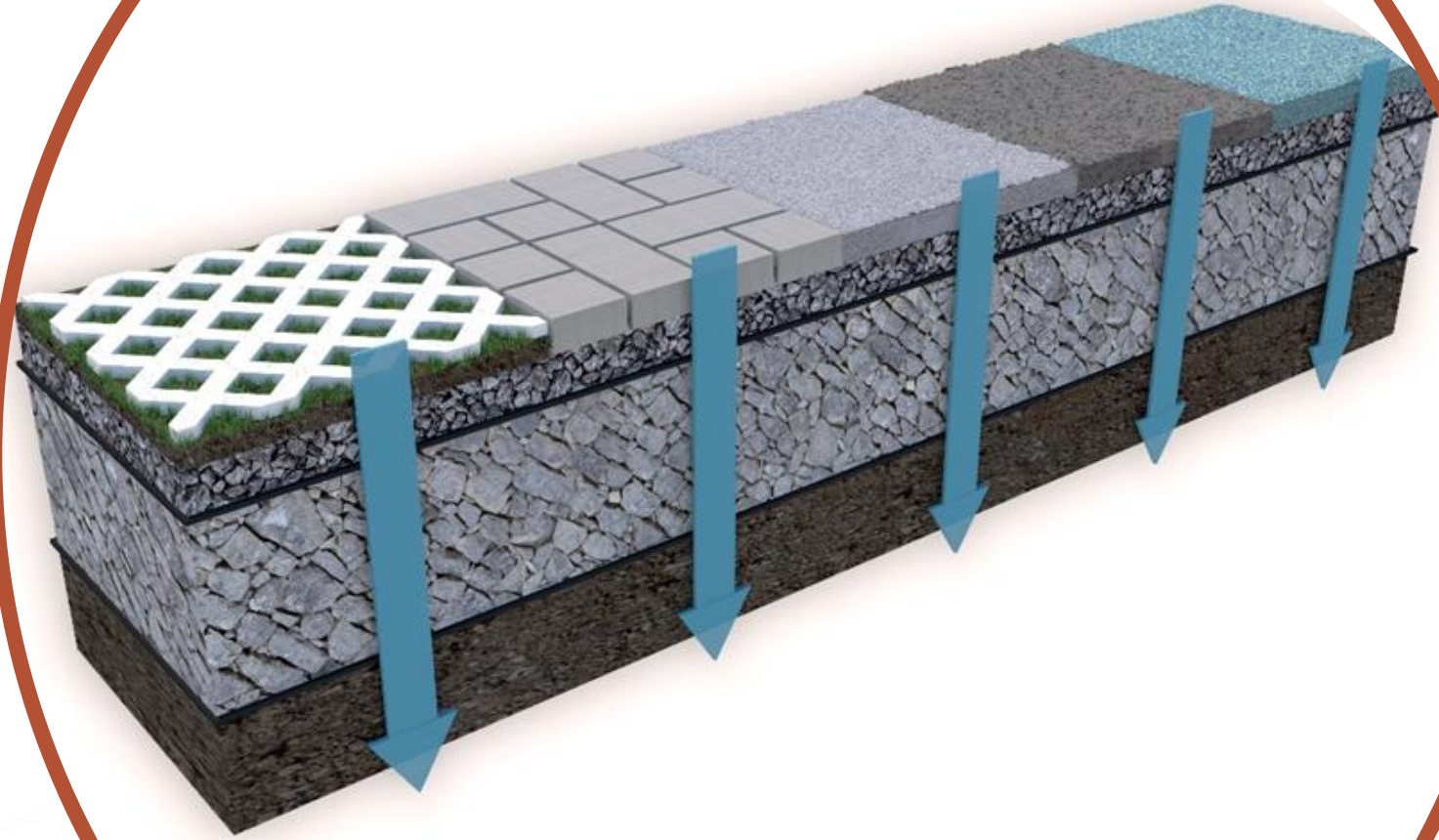


Key Design Element

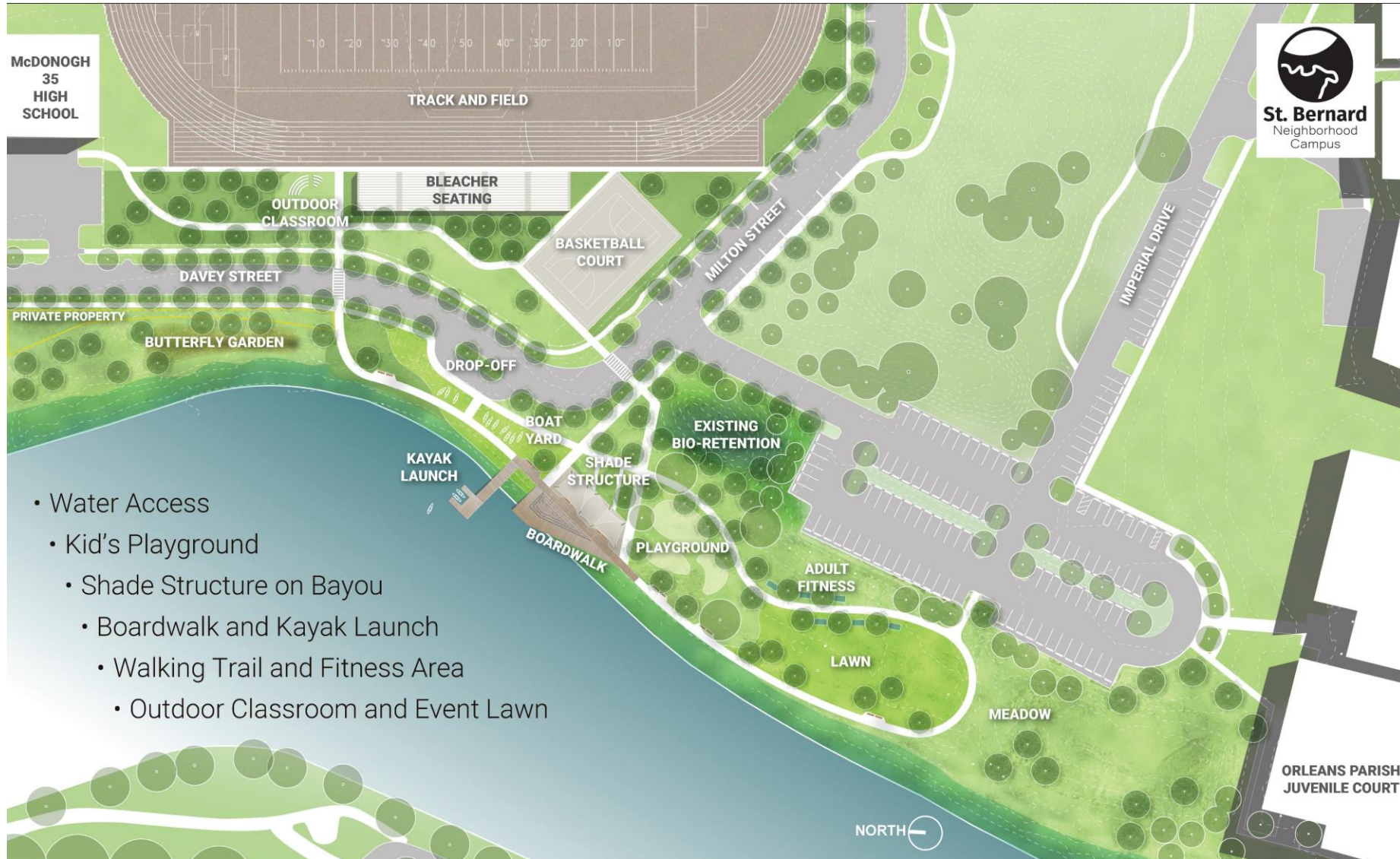
Sidewalk and ADA Ramps

- May Include permeable concrete to promotes infiltration reducing subsidence

Pavement Repairs - Recovery Roads Scope has been added for streets where construction overlaps



Phase 3 – Bayou St. John Park



- Water Access
- Kid's Playground
- Shade Structure on Bayou
- Boardwalk and Kayak Launch
- Walking Trail and Fitness Area
- Outdoor Classroom and Event Lawn

Bayou St. John Park Rendering

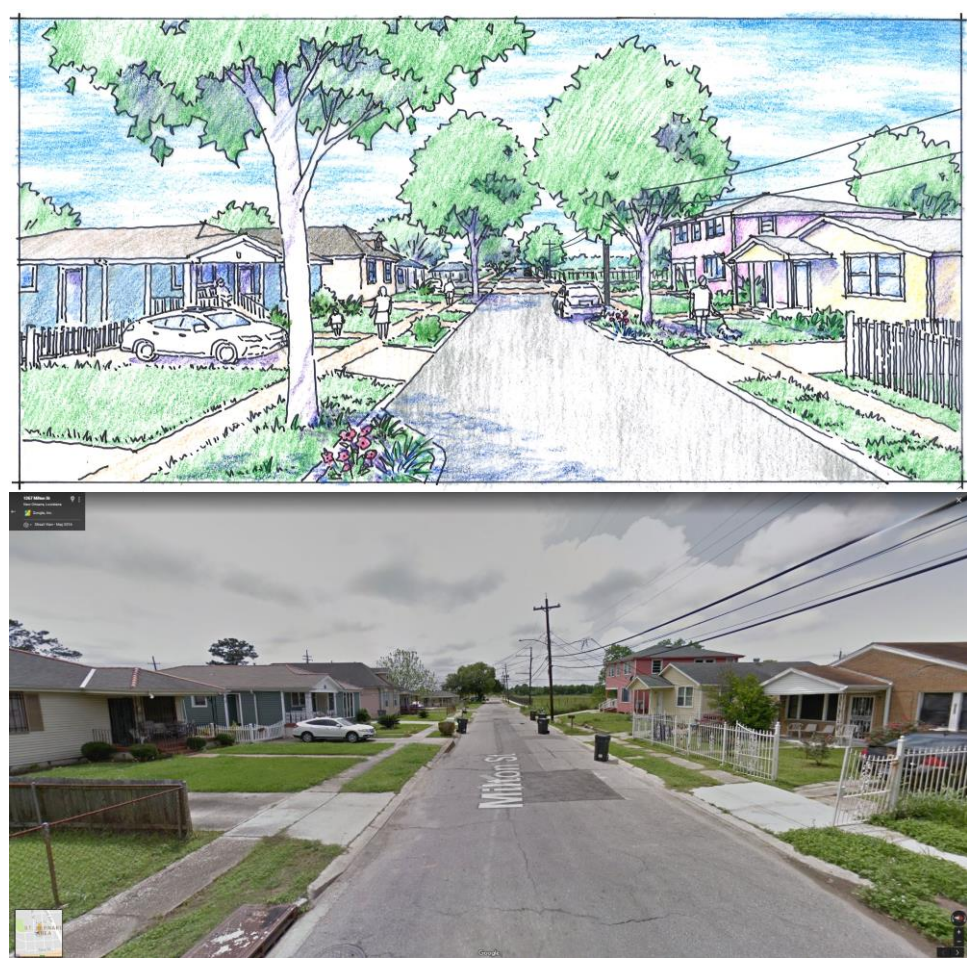


Streetscape Design

Kayak Launch & Playground



Milton Street Improvements



Project Cost

Project Components:

- | | |
|----------------|---|
| Phase 1 | Stormwater: \$5.7M
Athletic Fields: \$2.1M |
| Phase 2 | Concession Building: \$740,000 |
| Phase 3 | Road Repairs, Green Infrastructure & Park: \$3.3M |

PROBABLE CONSTRUCTION COST = Approx. \$12M

including 10% contingency

AACE Class 2 Accuracy range -15% to +20%



Project Benefit Cost Analysis

Greatest Benefits

- Property Value Increase
- Flood Damage Reduction
- Subsidence Reduction
- Stormwater Treatment

Costs

- Capital Expenditures
- Operations and Maintenance
- Replacement Costs

Triple Bottom Line (in NPV) = \$4.8M

Benefit Cost Ratio = 1.4

Impact Type	Cost/Benefit	Expected Value
Financial	Capital Expenditures	-\$7,478,000
Financial	Operations and Maintenance	-\$3,033,000
Financial	Replacement Costs	-\$1,477,000
Financial	Residual Value of Assets	\$3,000
Social	Subsidence Road Impact	\$2,357,000
Social	Subsidence Property Impact	\$464,000
Social	Public Health	\$71,000
Social	Public Health CVD Impact	\$21,000
Social	Property Value	\$931,000
Social	Flood Damage	\$8,935,000
Social	Recreational Value	\$1,078,000
Social	Education	\$105,000
Social	Heat Island Effect	\$32,000
Environmental	Carbon Emission Sequestration	\$4,000
Environmental	Air Pollution Sequestration	\$13,000
Environmental	Stormwater Treatment	\$2,760,000

	Expected Value
Financial	-\$11,985,000
Social	\$13,994,000
Environmental	\$2,777,000
Triple Bottom Line NPV	\$4,786,000

Operations & Maintenance

Shared Operation between School and NORDC defined in Agreement

NORDC Operates

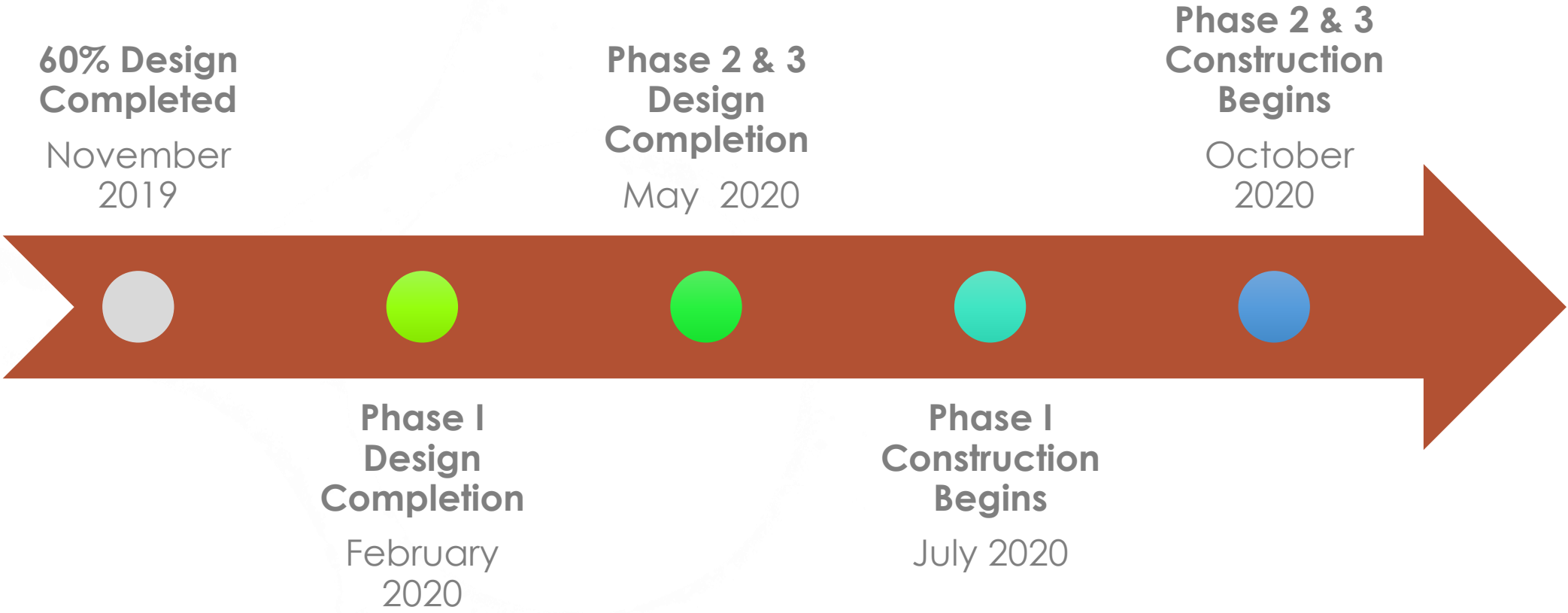
Monday –Friday	4 PM-9 PM
Saturday	9AM -2 PM
Sunday and Holidays	As Needed

Maintenance to be shared between NORDC and School
– Under Negotiations

Maintenance of Rain Garden – Adjacent Homeowner



Project Schedule



Questions – Thank You!



Tom Cancienne, PE
1340 Poydras Street Suite 1420,
New Orleans, LA 70112-1241
Phone: (504) 654-1726

Thomas.cancienne@stantec.com



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